IN THE CLAIMS

Please amend the claims as follows:

Claims 1-5 (Canceled).

Claim 6 (New): An optical receiver comprising:

a pre-amplifying unit that performs voltage conversion and amplification of an output of a light-receiving element that receives a light signal and converts the received light signal into a current signal; and

a regenerating unit including a discriminating circuit that receives an output signal of the pre-amplifying unit as an input signal and performs a signal discrimination of the input signal based on a threshold generated based on the input signal, wherein

the pre-amplifying unit includes a first average detecting circuit that detects an average of output signals of the pre-amplifying unit, and controls an amplification gain based on a result of comparison between an output of the first average detecting circuit and a predetermined reference voltage,

the regenerating unit further includes a second average detecting circuit that detects an average of input signals to the discriminating circuit, and

the discriminating circuit receives an output of the second average detecting circuit as the threshold for signal discrimination of the input signal.

Claim 7 (New): The optical receiver according to claim 6, wherein

the regenerating unit further includes

a comparing circuit that receives an in-phase output and a reverse-phase output of the discriminating circuit as a differential input;

a buffer unit that holds the output of the second average detecting circuit;

· a sample-and-hold circuit that holds or transmits an output of the comparing circuit; and

an offset adjusting circuit that adjusts offset components of the buffer unit based on an output of the sample-and-hold circuit.

Claim 8 (New): The optical receiver according to claim 7, wherein

the offset adjusting circuit adjusts the offset components of the buffer unit in a non-signal period after switching power on.

Claim 9 (New): The optical receiver according to claim 7, wherein

the offset adjusting circuit adjusts the offset components of the buffer unit in a non-signal period between the light signals.

Claim 10 (New): A discrimination-threshold generating method for an optical receiver, the optical receiver including a pre-amplifying unit that performs voltage conversion and amplification of an output of a light-receiving element that receives a light signal and converts the received light signal into a current signal, and a regenerating unit including a discriminating circuit that receives an output signal of the pre-amplifying unit as an input signal and performs a signal discrimination of the input signal based on a threshold generated based on the input signal, the discrimination-threshold generating method comprising:

controlling an amplification gain of the pre-amplifying unit based on a result of comparison between a first average detection output obtained by detecting an average of output signals of the pre-amplifying unit and a predetermined reference voltage; and

outputting a second average detection output obtained by detecting an average of input signals to the discriminating circuit to the discriminating circuit as the threshold for performing signal discrimination of the input signal.